

Amendments to the Claims

The following is a complete listing of the claims indicating the current status of each claim and including amendments currently entered.

1 - 18 (Withdrawn)

19 - 25 (Canceled)

26 - 32 (Withdrawn)

33. (Canceled) A method according to claim 30, wherein the chelator is TPEN or a TPEN derivative.

34. (New) A composition for inhibiting at least one of tumor cellular invasion and tumor metastasis, the composition comprising:

a. an effective amount of at least one of:

- i. NNN'N'-Tetrakis- (2-pyridyl methyl)-ethylenediamine (TPEN); and
- ii. a TPEN derivative; and

b. a pharmaceutically acceptable carrier.

35. (New) A composition according to claim 34, wherein the TPEN is in a concentration of 0.001-100 micromolar.

36. (New) A composition according to claim 34, wherein said TPEN has a higher affinity for divalent zinc ions than for other divalent metallic ions.

37. (New) A composition according to claim 34, wherein said composition is lipid soluble.

38. (New) A composition according to claim 34, wherein said TPEN has a greater ion affinity for zinc (Zn^{2+}) ions than for Fe^{2+} ions.

39. (New) A composition according to claim 38, wherein said TPEN has a greater ion affinity for Fe^{2+} ions than for Mn^{2+} ions.

40. (New) A composition according to claim 39, wherein said TPEN has a greater ion affinity for Mn^{2+} ions than for Ca^{2+} ions.

41. (New) A composition according to claim 40, wherein said TPEN has a greater ion affinity for Ca^{2+} ions than for Mg^{2+} ions.

42. (New) A composition according to claim 34, wherein said TPEN derivative is

selected from the group consisting of ethylenediamine, diethylenetriamine, triethylenetetramine, triethylenediamine, tetraethylenepentamine, aminoethylmethanol amine, aminoethylpiperazine, pentaethylenehexamine, triethylenetetramine-hydrochloride, tetraethylenepentamine- hydrochloride, pentaethylenehexamine-hydrochloride, tetraethylpentamine, captopril, penicilamine and transition metal binding peptides.

43. (New) A composition according to claim 34, wherein said TPEN is complexed with a metal.

44. (New) A method for preventing at least one of tumor cellular invasion and tumor metastasis in a mammal, the method comprising administering an effective amount of at least one of:

NNN'N'-Tetrakis- (2-pyridyl methyl)-ethylenediamine (TPEN); and
a TPEN derivative;

to said mammal.

45. (New) A method according to claim 44, wherein said TPEN prevents metastatic cellular invasion in said mammal.

46. (New) A method according to claim 44, wherein said TPEN prevents cancerous cell migration in said mammal.

47. (New) A method according to claim 44, wherein the TPEN is in a concentration of 0.001-100 micromolar.

48. (New) A method according to claim 44, wherein said TPEN selectively prevents capillary formation in tumor and cancerous cells in said mammal.

49. (New) A method according to claim 48, wherein said preventing capillary formation inhibits the spread of cancer in said mammal.

50. (New) A method according to claim 48, wherein said TPEN is lipid soluble.

51. (New) A method according to claim 44, wherein said TPEN has a higher affinity for divalent zinc ions than for other divalent metallic ions.

52. (New) A method according to claim 51, wherein said higher affinity enables normal physiological function in said mammal.

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53. (New) A method according to claim 44, wherein said method further prevents or treats a disease or disorder selected from the group consisting of: primary malignancy, carcinoma, Hodgkin's disease, lymphoma, a hematological disease, angiogenesis, vasculogenesis, tumor cellular invasion and tumor metastasis.
54. (New) A method according to claim 44, wherein said TPEN permeates across cell membranes.
55. (New) A method according to claim 42, wherein said TPEN is complexed with a metal to form a TPEN-metal complex.
56. (New) A method according to claim 44, wherein said TPEN derivative is selected from the group consisting of ethylendiamine, diethylenetriamine, triethylenetetramine, triethylenediamine, tetraethylenepentamine, aminoethylethanol amine, aminoethylpiperazine, pentaethylenehexamine, triethylenetetramine-hydrochloride, tetraethylenepentamine- hydrochloride, pentaethylenehexamine-hydrochloride, tetraethylpentamine, captopril, penicilamine and transition metal binding peptides.